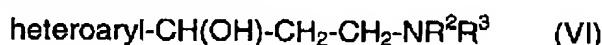


AMENDMENTS TO CLAIMS

This version of the claims will replace all prior versions, and listings, of claim in the present application.

1.-9. (Cancelled)

10. (Currently Amended) A Process for preparing enantiomer-enriched compounds of the formula (VI),



in which

heteroaryl has the same meaning as that given under formula (I) is a monocyclic or bicyclic aromatic radical having a total of from 6 to 10 ring atoms, where none, one or two ring atoms, selected from the group oxygen, sulphur and nitrogen, is present per cycle and one or two is present in the entire aromatic radical, and where the monocyclic or bicyclic aromatic radical is optionally substituted, once, twice or three times, by radicals which are selected, in each case independently of each other, from the group hydroxyl, C₁-C₈-alkyl, cyano, COOH, COOM, where M is an alkali metal ion or a half equivalent of an alkaline earth metal ion, COO-(C₁-C₄-alkyl), O-(C₁-C₄-alkyl), N(C₁-C₄-alkyl)₂, NH-(C₁-C₄-alkyl), NO₂, fluorine, chlorine, bromine, C₁-C₄-fluoroalkyl, CONH₂ and CONH-(C₁-C₄-alkyl), and

R² and R³ are, in each case independently of each other, hydrogen, C₁-C₈-alkyl, C₄-C₁₄-aryl or C₅-C₁₅-arylalkyl, or the two radicals R² and R³ are together C₃-C₁₂-alkylene,

comprising:

in a step a), converting compounds of the formula (I)-in accordance with Claim 4,

CH7929

heteroaryl-CO-CH₂W (I),

in which

~~heteroaryl is a monocyclic or bicyclic aromatic radical having a total of from 5 to 10 ring atoms, where none, one or two ring atoms, selected from the group oxygen, sulphur and nitrogen, is present per cycle and one or two is present in the entire aromatic radical, and where the monocyclic or bicyclic aromatic radical is optionally substituted, once, twice or three times, by radicals which are selected, in each case independently of each other, from the group hydroxyl, C₁-C₈-alkyl, cyano, COOH, COOM, where M is an alkali metal ion or a half equivalent of an alkaline earth metal ion, COO-(C₁-C₄-alkyl), O-(C₁-C₄-alkyl), N(C₁-C₄-alkyl)₂, NH-(C₁-C₄-alkyl), NO₂, fluorine, chlorine, bromine, C₁-C₄-fluoroalkyl, CONH₂ and CONH-(C₁-C₄-alkyl) defined as in formula (IV), and~~

W is C(O)YR¹_n, where Y is = oxygen and n is = 1 or Y is nitrogen and n is = 2, or

W is CN, and

R¹ are, in each case independently of each other, hydrogen, C₁-C₈-alkyl, C₄-C₁₀-aryl or C₅-C₁₁-arylalkyl or, when Y is nitrogen, the two radicals R¹ are together C₃-C₅ alkylene,

into enantiomer-enriched compounds of formula (II),

heteroaryl-CH(OH)-CH₂-CO-CH₂W (II)

where, in each case,

heteroaryl and W have the meanings mentioned under formula (I), and

~~in a step b)~~

i) when W is COOR^1 C(O)YR^1 , where Y is nitrogen, n = 2 and R^1 has the meanings mentioned in formula (I), hydrogen, $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_4\text{-C}_{10}$ -aryl or $\text{C}_5\text{-C}_{11}$ -arylalkyl,

reacting the enantiomer-enriched compounds of formula (II) with amines of the formula (III)



in which R^2 and R^3 have the meaning mentioned under formula (VI), to give enantiomer-enriched compounds of the formula (IV),

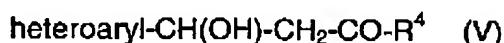


in which heteroaryl, R^2 and R^3 have the previously mentioned meanings, or

ii) when W is $\text{CON}(\text{R}^1)_2$ and the R^1 radicals are in each case, independently of each other, hydrogen, $\text{C}_1\text{-C}_8$ -alkyl, $\text{C}_4\text{-C}_{10}$ -aryl or $\text{C}_5\text{-C}_{11}$ -arylalkyl, or the two R^1 radicals are together $\text{C}_3\text{-C}_5$ -alkylene,

converting the enantiomer-enriched compounds of the formula (II) by reacting with amines of the formula (III), into enantiomer-enriched compounds of the formula (IV), and

iii) when W is CN, converting the compounds of the formula (II) directly, by aminolysis/hydrolysis, into compounds of the formula (IV), or converting initially hydrolysis, partial hydrolysis or mixed alcoholysis/hydrolysis, into compounds of the formula (V)



in which heteroaryl has the meaning given under formula (I)

and R⁴ is OR¹ or NH₂, where R¹ has the abovementioned meaning, and

converting by amidation into enantiomer-enriched compounds of the formula (IV), and

in a step c), converting the enantiomer-enriched compounds of the formula (IV) by reduction, into enantiomer-enriched compounds of the formula (VI) having the abovementioned meaning.

11. (Currently Amended) Process according to Claim 10, characterized in that, in the formulae (III), (IV) and (VI), R² and R³ are, in each case independently selected from, hydrogen, methyl, ethyl, isopropyl, phenyl or benzyl.

12. (Original) Process according to Claim 10, characterized in that compounds of the formula (I) in which W is not CN are obtained by reacting compounds of the formula (VII)



in which heteroaryl has the meaning mentioned under formula (I),

with compounds of the formula (VIII),

$$R^1-O-W \quad (VIII)$$

in which

R^1 and W have the same meanings as those which were given under the formula (I), with W not being CN, in the presence of a base.

13. (Original) Process according to Claim 10, characterized in that the reduction of compounds of the formula (VI) is effected using complex boron hydrides or aluminium hydrides.

14. (Original) Process according to Claim 10, characterized in that (1S)-3-(methylamino)-1-(2-thiophenyl)-1-propanol, (1R)-3-(methylamino)-1-(2-thiophenyl)-1-propanol, (1S)-3-(dimethylamino)-1-(2-thiophenyl)-1-propanol or (1R)-3-(dimethylamino)-1-(2-thiophenyl)-1-propanol is prepared.

15. (Original) Process according to Claim 10, characterized in that in a further step d),

the enantiomer-enriched compounds of the formula (VI) are reacted, in the presence of base, with compounds of the formula (XI)

$$R^6-Hal \quad (XI)$$

in which

R^6 is phenyl or naphthyl which is optionally substituted, once or more than once, by substituents which are selected, in each case independently of each other, from the group cyano, $CO-(C_1-C_{12}-alkyl)$, $O-(C_1-C_{12}-alkyl)$, $(C_1-C_{12}-alkyl)$, fluorine, chlorine, bromine and C_1-C_{12} -fluoroalkyl, and

Hal is fluorine, chlorine, bromine or iodine.

to give enantiomer-enriched compounds of the formula (X),



in which heteroaryl, R² and R³ have the meaning given under formula (I) and R⁶ has the meaning given under formula (XI).

16. (Original) Process according to Claim 15, characterized in that (S)-N-methyl-3-(1-naphthalenylloxy)-3-(2-thienyl)propylamine and (R)-N-methyl-3-(1-naphthalenylloxy)-3-(2-thienyl)propylamine, or their ammonium salts, are prepared.

17-18 (Cancelled)

CH7929

7